*REMARKS/ARGUMENTS*

*Present Invention and Pending Claims*

Claims 1-9 are currently pending. Claims 1-6 and 9 are directed to a resin composition, whereas claims 7 and 8 are directed to a laminate structure comprising the resin composition.

In particular, the present invention relates to a resin composition comprising a saponified ethylene-vinyl acetate copolymer (hereinafter to be abbreviated EVOH) (A) and a substituted 9,10-anthraquinone (B) having a substituent at at least one of the 2-, 3-, 6- and 7-positions and showing a percent weight loss when stood with heating at 250°C for 60 minutes of not more than 5%. With this combination of features, in particular by adding the substituted anthraquinone, the present invention provides a resin composition that has superior oxygen barrier properties and appearance, is stable upon processing at high temperatures, and provides adhesion between layers.

*Summary of the Office Action*

Claims 1-4, 7, and 8 have been rejected under 35 U.S.C. § 103(a), as allegedly obvious over Koyama et al. (U.S. Patent 5,153,038) in combination with Hu et al. (U.S. Patent 3,768,976). Claims 5, 6, and 9 have been rejected under 35 U.S.C. § 103(a), as allegedly obvious over Koyama et al. in combination with Hu et al. and Nippon Synthetic (JP 11049919A). Reconsideration of the pending claims is respectfully requested.

*Discussion of the Obviousness Rejections*

*A. Claims 1-4, 7, and 8*

According to the Office Action, Koyama et al. allegedly discloses plastic containers comprising a barrier layer containing an oxygen scavenger and two outer layers of thermoplastic resin. The gas barrier resin can be a saponified ethylene-vinyl acetate copolymer (i.e., EVOH). The Office concedes that Koyama et al. does not disclose that the resin composition also comprises a substituted 9,10-anthraquinone. Hu et al. allegedly discloses the use of 9,10-anthraquinone-β-sodium sulfonate as a dye to indicate oxygen transfer through packaging material. According to the Office, it would have been obvious to

use the anthraquinone compound disclosed by Hu et al. as an indicative dye in the packaging disclosed by Koyama et al.

Koyama et al. discloses a plastic multi-layer vessel with a gas barrier resin layer that contains an oxygen scavenger. EVOH is described as a suitable material for the gas barrier resin (see, e.g., col. 7, lines 17-32). As for the oxygen scavenger, however, only metal powder, low-valence metal oxide, a reducing metal compound, and a high molecular weight compound with a polyhydric phenol in the skeleton are disclosed (see, e.g., col. 6, lines 1-27). Koyama et al. does not disclose that the oxygen scavenger can be a 9,10-substituted anthraquinone having a substituent at at least one of the 2-, 3-, 6- and 7-positions, let alone a 9,10-substituted anthraquinone that has a specific percent weight loss when heat is applied for a specific time and temperature.

Hu et al. discloses a temperature-time integrating indicator comprising a transparent outer film pouch containing two transparent inner film pouches. Each of these inner film pouches is filled with an aqueous solution of a redox dye. Hu et al. states that 9,10-anthraquinone-β-sodium sulfonate is suitable as the redox dye (see, e.g., col. 2, lines 21-25, col. 3, lines 9-12, and Example 1).

Hu et al. does not teach or suggest a *resin composition* comprising EVOH and a substituted 9,10-anthraquinone and a film pouch made from such a resin composition. As discussed above, Hu et al. merely discloses the use of an aqueous solution of a redox dye (e.g., anthraquinone) filled in a pouch to be used as an indicator.

After reading Koyama et al., one of ordinary skill in the art would not be led to the disclosure of Hu et al. in the first place because Koyama et al. states that the oxygen scavenger preferably is "substantially insoluble in water" (col. 6, lines 5-7). This statement constitutes a teaching away from using 9,10-anthraquinone-β-sodium sulfonate as the oxygen scavenger due to its high water solubility. Therefore, one of ordinary skill in the art would not be led to the Hu et al. reference. Even if, for the sake of argument, one of ordinary skill in the art considered Hu et al., there simply is no motivation to add anthraquinone to a gas barrier resin as an oxygen scavenger in the plastic multi-layer vessel of Koyama et al. because Hu et al. does not relate to *a resin composition* (e.g., EVOH) containing an oxygen scavenger (e.g., anthraquinone). Moreover, since the redox dye of Hu et al. is used in an

aqueous solution, there would not be a reasonable expectation of success to modify the resin layer of Koyama et al. and add a substituted 9,10-anthraquinone, particularly one that is water soluble.

In view of the foregoing, the subject matter defined by claims 1-4, 7, and 8 is unobvious in view of Koyama et al. and Hu et al. As a result, the obviousness rejection of these claims is without merit and should be withdrawn.

*B. Claims 5, 6, and 9*

In regards to the obviousness rejection of claims 5, 6, and 9, the Office acknowledges that Koyama et al. and Hu et al. fail to disclose the inclusion of an acid component and do not specify the water content of the EVOH. Nippon Synthetic reportedly discloses EVOH with small amounts of acid components and a water content up to 50%. In addition to the argument relating to claims 1-4, 7, and 8, the Office asserts that it would have been obvious to combine and optimize the teachings of Nippon Synthetic to provide improved transparency, gas barrier properties, and film appearance.

Claims 5, 6, and 9 either directly or indirectly depend on claim 1. Therefore, the discussion pertaining to claims 1-4, 7, and 8 in regards to Koyama et al. and Hu et al. is equally applicable to claims 5, 6, and 9.

Further, Nippon Synthetic merely discloses an EVOH composition comprising EVOH, an alkali and/or alkaline earth metal acetate, acetic acid, phosphoric acid or an alkali metal hydrogen phosphate, and water. Nippon Synthetic does not teach or suggest a resin composition comprising a 9,10-substituted anthraquinone having a substituent at at least one of the 2-, 3-, 6- and 7-positions. Therefore, the disclosure of Nippon Synthetic does not remedy the deficiencies of combining Hu et al. and Koyama et al., as discussed above.

As previously discussed, there is no teaching or suggestion in any of the cited references that would motivate one of ordinary skill in the art to combine the cited references so as to provide the resin composition of the present invention as defined by the pending claims. The only way in which the combined disclosures of the Koyama et al., Hu et al., and Nippon Synthetic references might be considered as teaching or suggesting the present invention is through the use of hindsight, i.e., with the knowledge of the present application

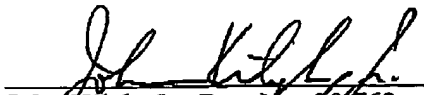
and the invention as claimed therein. It is impermissible for an obviousness rejection to rely on hindsight reconstruction of the claimed invention using Applicants' invention as a template and selecting elements from references to fill in that template. See *In re Gorman*, 933 F.2d 982, 18 U.S.P.Q.2d 1885 (Fed. Cir. 1991).

In view of the foregoing, the subject matter defined by claims 5, 6, and 9 is unobvious in view of Koyama et al., Hu et al., and Nippon Synthetic. As a result, the obviousness rejection is without merit and should be withdrawn.

*Conclusion*

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



John Kilyk, Jr., Reg. No. 30,763
LEYDIG, VOIT & MAYER, LTD.
Two Prudential Plaza, Suite 4900
180 North Stetson Avenue
Chicago, Illinois 60601-6780
(312) 616-5600 (telephone)
(312) 616-5700 (facsimile)

Date: December 16, 2005